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ABSTRACT

High school, postsecondary education, and work experience records of graduates from four high school programs of study were compared. The population consisted of all graduates (n=7,890) from academic, general, area vocational-technical school (AVTS), and home school vocational programs (HSVOC) from 16 sending school districts in Berks County, Pennsylvania, for the years 1983, 1986, and 1990. Data regarding high school experiences were obtained by transcript review. The effective response rate to a questionnaire and follow-up approached 90.4 percent. Findings indicated that the percentage of students completing the secondary academic program grew steadily from 45.8 percent in 1983 to 57.8 percent in 1990; students appeared to migrate from the other three programs, with the largest decline coming from the high school vocational program. The total number of secondary credits earned increased. Over 70 percent felt that more information about careers would have been beneficial in choosing their present occupation. The most influential person in their career decision was an "other," followed by father and then mother. Over 84 percent were satisfied with preparation for career and/or higher education. Over 43 percent were working full time. Academic students completed more years of postsecondary education than the group as a whole. Approximately 85 percent working full time reported they received some on-the-job training. Employment for male and female graduates continued to follow traditional sex role stereotypes. (The 18-page report is followed by 45 pages of tables.) (YLB)

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November 1991

Executive Summary

Comparative Analysis of High School Graduates in Berks County from Vocational, Academic and General Curricula for the years 1983, 1986, and 1990

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EXECUTIVE SUMMARY
ON
COMPARATIVE ANALYSIS OF HIGH SCHOOL CURRICULA
FROM
VOCATIONAL, ACADEMIC AND GENERAL CURRICULA
FOR THE YEARS 1983, 1986, AND 1990

Purpose of the Study

The purpose of this study was to compare the high school, postsecondary education and work experience records of graduates from four different high school programs of study (academic, general, area vocational-technical school (AVTS), and home school vocational programs (HSVOC) for the years 1983, 1986, and 1990. The funding was provided by the Pennsylvania Department of Education, Bureau of Vocational and Adult Education. The research was conducted during the 1990-91 school year in the attendance area of Berks County. The Berks AVTS area is a combination of suburbs, small towns, and rural areas. All sixteen school districts that currently send to Berks AVTS were surveyed. Technical expertise and data analysis were provided under subcontract with the Pennsylvania State University.

Scope of the Study

The population for this study consisted of **all graduates** of 1983, 1986, and 1990 from the four different high school programs of the sixteen sending school districts. The population contained 7,890 graduates. Students were assigned to one of the four programs of study by high school counselors after reviewing individual student transcripts. Data regarding high school experiences were obtained by transcript review. All individuals were sent a questionnaire during the Thanksgiving holiday to obtain data regarding their post secondary education and work experience record. A second questionnaire was sent to all nonrespondents during the Christmas holidays as a follow-up.

A return rate of 45% was attained on this questionnaire. After subtracting those students who could not be reached due to the expiration of their postal forwarding orders, the effective return rate approached 90.4%.

Findings: Secondary School Experience

A. The percentage of students completing the academic program grew steadily from 45.8% in 1983 to 57.8% in 1990. The students appeared to migrate from the other three programs with the largest decline coming from the high school vocational program (12.4% in 1983 to 7.4% in 1990). AVTS programs also declined from 17.9% to 14.2% and the general track showed the least change from 23.9% to 20.6%.

B. Reflecting the new State graduation requirements, the total number of credits earned increased during the period studied. The average student exceeded considerably the State-Mandated 21 credits. Graduates in the academic and home school vocational programs earned more credits than those in other curricula. The grade point averages of academic students and girls were higher. All students earned more than one credit of vocational education during their high school program. However, overall, the number of vocational credits earned has declined from 1983 to 1990. The average student took 4.8 credits of vocational education while completers of an AVTS program took 8.5 credits.

C. In spite of an increased emphasis on math and science since 1983, including the number of required credits for graduation, only in the academic track have a majority of students completed courses above the general math and general science levels.

D. Overall, an almost equal number of males and females are enrolled in the academic track. A disproportionate number of males are taking an AVTS program while a disproportionate number of females are completing the home school vocational program.

E. The education level of both mother and father has increased over the years. For both parents the greatest increase in education has been in the 13-16 year category. Significantly, those students who are enrolled in the academic track have the majority of parents who have 13 or more years of education. The majority of students in the general and vocational programs have parents who have attained a high school education or less.

F. An overwhelming number of graduates responded that more information about careers would have been beneficial for them (70.6%) in choosing their present occupation.

The graduates responded that the most influential person in making their career decision was an "other" (39.7%), followed by the father (22.1%) and then mother (18.9%). The counselor had the least influence in the graduate's career decision (2.2%).

G. Over 84% of the graduates were satisfied with the preparation for career and/or higher education they have received. The group that was least satisfied was the general students.

H. General curriculum students wished to be viewed as students in the academic track. This difference shows up in the discrepancy between the high school counselor's designation of general students (22.5%) and the students' reports of their track (15.9%, and is confirmed in the relationship between actual percentage of counselor-picked academic students (51.3%) and student-perceived academic students (58.6%). (Table 2.1)

Post-High School Experiences

(A) Over 43% of those students responding to the questionnaire were working full-time. The AVTS group had the highest percentage at 74.6% working full-time. Those students in an academic track were mainly involved in the pursuit of higher education (45.7%). 73.2% of the questionnaire respondents are or have been attending some form of postsecondary education; of this group, 82% attended school in state. The most common institution attended was a four year college; of those attending some higher education, 79.6% of academic, 26.3% of general, 11.5% of AVTS, and 17.2% of HSVOC completers entered four year colleges. Graduates of the home school vocational programs were more likely to have dropped out.

(B) Academic students completed more years of postsecondary education (3.4 years for the class of 1983) than the group as a whole (2.3 years). Students completing other programs of study had approximately equal postsecondary experiences (approximately one year of postsecondary for the 1983 graduating class). Sixty-five percent of the graduates from the academic program from 1983 responded that they completed four or more years of postsecondary education while the group as a whole indicated that approximately 40 percent had completed four or more years of postsecondary education.

(C) The unemployment rate of the respondents was 2.9%. Graduates of the academic program were the least likely to be unemployed; graduates of the general curriculum, the most likely.

(D) Family and friends were the most common referral source for employers. Calling on employers directly was the second most common technique. There were some significant differences by curriculum type. Graduates of AVTS were more likely to use family and friends. HSVOC used Co-op more than the other groups, and the academic respondents were more likely to use the college placement office. Teachers and guidance counselors were reported to have played an insignificant role.

(E) Approximately 85% of the respondents working full-time reported that they received some "on-the-job" training. This training was mostly informal; only 28.9% of those working full-time had received any formal "on-the-job" training; home school vocational graduates were less likely to receive formal training. A majority of respondents are interested in receiving further training; "job specific" was the most requested training, with over a third requesting it.

(F) The greatest percentage of workers have employment in small firms; however, the percentage of people employed in the other size firms is fairly equal. The majority of the newest graduates (40.7%) work in firms smaller than 20 employees.

(G) Graduates of an academic program tend to view themselves as professionals. Students from the three other tracks fall mainly into the general employee category.

(H) Four-year college graduates tend to work for larger firms while high school and community college graduates work for firms employing less than 20 people.

(I) Commuting distance of the respondents was short, with 62.8% traveling two miles or less to work. Academic graduates were more likely to travel further.

(J) The majority (57%) of graduates tend to stay in Berks County. Those in the home school vocational curriculum (91%) seem to stay in Berks or surrounding counties. The academic group is more likely to move from the state. Eighty-three percent of Berks County graduates stayed in Berks or surrounding counties.

(K) Employment for male and female graduates in Berks County has continued to follow traditional sex role stereotypes, with 37% of males engaged in manufacturing and construction occupations and 34.1% of females occupied in the health and services industries.

(L) Earnings are highest for graduates of the academic program (mean $499/week) for the 1983 graduating class followed by AVTS graduates ($425/week). Students completing the general curriculum are lowest at $403/week. AVTS graduates from the 1986 class earn the most ($400/week) followed closely by graduates from the academic program ($398/week).

November 1991

FINAL REPORT

Comparative Analysis of High School Graduates in Berks County from Vocational, Academic and General Curricula for the Years 1983, 1986, and 1990

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COMPARATIVE ANALYSIS OF HIGH SCHOOL CURRICULA FROM VOCATIONAL, ACADEMIC AND GENERAL GRADUATES FOR THE YEARS 1983, 1986, AND 1990

The following research project was conducted in response to a request for a proposal from the Pennsylvania Department of Education, Bureau of Vocational and Adult Education. The grantee was the Berks Vocational-Technical School located near Reading, Pennsylvania.

Purpose of the Research

The purpose of this research was to provide high school curriculum planning and evaluation data. A second purpose was to develop a data gathering procedure that could be replicated in other area vocational-technical service areas. The study compared the high school and post-high school experiences of individuals who graduated in 1983, 1986, and 1990. These experiences were contrasted by year of graduation and by program of study: Academic (ACA), Berks Vocational-Technical School (AVTS), Home School Vocational (HSVOC), and General (GEN).

Scope of the Study

The study included all 1983, 1986, and 1990 graduates from Antietam, Boyertown Area, Brandywine Heights, Conrad Weiser Area Daniel Boone, Exeter Township, Governor Mifflin, Hamburg Area, Kutztown Area, Oley Valley, Schuylkill Valley, Tulpehocken Area,

Twin Valley, Wilson and Wyomissing Area School Districts (n = 7,890). Information regarding secondary school experiences of the graduates was collected from high school transcripts by guidance counselors in the sixteen high schools. A questionnaire was mailed to all graduates in order to obtain data regarding post-high school work and higher education experiences. Forty-five percent of the questionnaires were returned (n = 3,579).

Background of the Study

Between 1983 and 1990 significant demographic and regulatory changes have affected secondary high schools in Pennsylvania. Mirroring the national trend, Pennsylvania's high school enrollments decreased during the period. Between 1982 and 1989 the number of public high school graduates declined by 17% (PDE, 1989). In 1984, Pennsylvania increased the minimum number of credits needed for graduation to 21. It also stipulated that as part of the 21 credit requirement students must complete four courses in English, three in science, three in math and three in social studies; making it one of the most demanding in the nation. The objectives of this reform were to increase the total number of courses students took in high school and, by so doing, to insure that students moved higher in the curriculum by taking more advanced courses. The reform was also accompanied by a strong "go to college" message with the objective of improving the state's percentage of students going on to higher education which, at that time, was among the lowest in the country.

During the same period, enrollment in vocational education programs declined dramatically across the state. Between the 1984-85 and 1988-89 school years enrollment in approved vocational education programs decreased a dramatic 37.8%. Because this decline began at about the same time as increased graduation

requirements were implemented, it is speculated that one led to the other. Specifically, it is often suggested that students find it impossible to get all the required courses and still take the necessary credits of vocational education required; thus they either drop the programs or do not enroll in the first place. One purpose of this research was to assess the impact of increased graduation requirements and declining enrollments on vocational education programs by comparing the high school transcripts of all graduates of 1983 who were unaffected by the reform measures with those of 1986 and 1990 who had to comply with some or all of them.

One important goal of secondary education is to prepare students to make the transition from high school to full-time employment, higher education, the military, etc. Thus effectiveness of students in making this transition and the types of activities they pursue after high school becomes an important planning and evaluation variable for the various curricular offerings; specifically Academic (ACA), General (GEN), Berks Vocational-Technical School (AVTS), and vocational programs such as business education offered within the comprehensive high schools (HSVOC). A second purpose of this research was to provide this type of data by surveying a class that had recently graduated (1990), a class that had graduated five years ago (1986) and eight years ago (1983). A specific objective was to contrast their experiences by curriculum type in order to evaluate the relative effectiveness of each curriculum type.

Statement of the Problem

The question of how to prepare today's youth for transition from school to the work force is a major issue in American education. Public education has recently been criticized by business/industry, and government for an apparent lack of accountability. The national "yardstick" for district success - pursuit of higher education - is recently being questioned, and other indicators suggested. Furthermore, educational reform movements have questioned the assumption that occupational-specific vocational education best prepares the non-college bound student for entering the workforce. Reformers have promoted a policy of emphasizing a core academic program for all students, insured through specific credit requirements. These two policies, vocational education and core curriculum, are not mutually exclusive in concept; however, time constraints in the standard high school day make it extremely difficult for students to take enough courses to meet specific graduation requirements, a comprehensive vocational education program, and enough higher level math and science courses to enroll in a postsecondary program.

The State of Pennsylvania is an example of the conflict between these two policies. Pennsylvania has invested in vocational education but has also increased graduation requirements, making it one of the most prescriptive in the country. Although the cause and effect is unproven, vocational enrollments throughout the state have dropped dramatically. There is reason to believe, however, that the decline in vocational education may not be solely due to increased graduation requirements. There has also been a dramatic decline in the general and home school vocational programs. It would seem that there are a multitude of forces at work to reduce participation in vocational education in Pennsylvania. A need exists to focus on what constitutes these

forces and how they are affecting our students and industry. Declining vocational education enrollments are a major concern especially if the students who are graduating are unprepared for the world of work. The current declining vocational enrollment has aggravated the growing shortage of technical workers in Pennsylvania. The overall purpose of this research was to examine the above issues by looking at the graduating classes in all curricula. The objective of this study was to contrast the experiences of graduates according to their major programs of study in high school: academic (ACA, general (GEN), vocational-technical school (AVTS), and home school vocational programs (HSVOC) as identified by guidance counselors at the sixteen high schools. The research addressed the following research questions.

Research Questions

<u>Secondary Experiences During the Period Studied:</u>

1. Did the distribution of graduates by curriculum type change?
2. Did total credits earned increase and were there differences between curriculum types?
3. Did grade point averages (GPA) increase and were there differences between curriculum types?
4. Did total vocational education credits earned increase and were there differences between curriculum types?
5. Did total math credits earned increase; did students move higher in the math curriculum and were there differences between curriculum types?
6. Did total science credits earned increase; did students move higher in the science curriculum and were there differences between curriculum types?

7. Would career information have been of help to graduates, and if so, at what level would it have been the most effective?
8. Who are the most significant individuals influencing the high school course selection and higher education choices?
9. Are graduates satisfied with their high school education?

Postsecondary Experiences:

1. How geographically mobile are graduates and were there differences between curriculum types?
2. What is the present status of graduates and were there differences between curriculum types?
3. What percentage of graduates have attended institutions of higher education; what type of institutions did they attend; where were they located; did they complete the program; and were there differences between curriculum types?
4. What is the distribution of graduates among eight occupational groups and were there differences between curriculum types?
5. What job seeking techniques are most commonly employed and were there differences between curriculum types?
6. What was the distribution of graduates among firms of various sizes and were there differences between curriculum types?
7. How much and what type of employer-provided training did graduates receive; and were there differences between curriculum types?
8. What level of employment (self-employed, manager, employee) did graduates have and were there differences between curriculum types?

9. What were the weekly earnings of graduates and were there differences between curriculum types?
10. Are graduates working within the region?

Hypotheses Tested

The study tested the following null hypotheses:

1. Secondary experience: Study groups (ACA, GEN, AVTS, HSVOC) will show no significant differences in the high school experience variables of grade point average (GPA), total credits and total vocational credits.

2. Postsecondary educational experience: Study groups (ACA, GEN, AVTS, HSVOC) will show no significant differences in the postsecondary education experience variable of rate of pursuit of postsecondary education, type of postsecondary institution attended, location of said institutions, and status in their higher education program of study.

3. Labor force experience: Study groups (ACA, GEN, AVTS, HSVOC), will show no significant differences in the labor market experience variables of labor force participation, weekly earnings, job satisfaction, mobility, employer-provided job training and size of firm.

Methodology

The total population for the study was all high school graduates from the sixteen sending school districts served by the Berks Vocational-Technical School for the years 1983, 1986, and 1990. These sixteen districts encompass a suburban and rural population. There are small towns scattered throughout the county.

The research included all four approved curricula. All students must have graduated from high school at the end of the three respective years.

The total sample was n = 7,890 graduates.

Transcript Data Collection: Prior to contacting the high school guidance counselors to obtain transcript data, meetings were held with the sixteen superintendents from the participating schools to solicit their support and involvement. Assurance of confidentiality was provided to the school district.

A meeting was held in August 1990 with the counselors who were to provide the transcript data information and Dr. Kenneth Gray. The purpose of this meeting was to inform the counselors about data collection methods and to work out any discrepancies or questions regarding the collection of this data. The types of questions to be covered on the questionnaire were also discussed.

Data pertaining to the high school experience variables were obtained from the transcripts. The guidance counselors from each of the participating high schools collected the data, including: student name, last known address, high school curriculum of study (ACA, GEN, AVTS, HSVOC), total credits, total vocational credits, total math credits, total science credits, highest math level,

highest science level, grade point average, handicapped status, gender, race, school, and year of graduation.

Meetings with the counselors revealed that there were problems with both grade point average and total credits. To accommodate the GPA variation, counselors converted each student's GPA to a common 1-12 scale (1 = D- to 12 = A+). The total credit problem was discussed and all credits shown are from grades 9-12.

Because math and science courses did not match exactly in all high schools (some offering for example, a pre-algebra course, etc.) all courses were converted to a common sequence. The math sequence consisted of six levels beginning with general math. All math courses that were below the level of Algebra I were encoded as general math. Science courses were converted to a four course sequence. The basic level was a combination of general science and biology as most all students take biology to meet state health requirements making it in effect the curriculum plan.

Questionnaire Data Collection: The remainder of the data collected were obtained through a mailed questionnaire. This instrument was revised after input from sending school districts to accommodate additional questions of interest to high schools and the Berks Vocational-Technical School. The total mailing was 7,890 questionnaires. The response rate for the questionnaire was 45% or 3,579 responses from the total number of 7,890. This was accomplished with two mailings occurring before the Thanksgiving and Christmas holidays. The effective response rate, after subtracting 3,872 questionnaires with expired forwarding address orders, was 90.4%.

The questionnaire rate percentage to transcript data percentage was well within limits by school district, gender, year of graduation, curriculum, and handicapped status.

The equality of responses rate and the high percentage return rate was due to a number of factors including the color of paper, a coffee packet included in the mailing, a stamped self-addressed return envelope, a cover letter signed by the home school counselor, the use of the title, "Graduate Research Survey", a post office box not associated with the Berks Vocational-Technical School; and two mailings, the first occurring during the Thanksgiving holidays and second before Christmas to reach the largest potential audience. Questionnaires were returned from as far away as Saudi Arabia (Operation Desert Storm) and the Fiji Islands.

Data Analysis: A two file data base was created: transcript data (n=7,890) and survey data (n=3,579). Frequencies and means were calculated for descriptive data. Depending on the nature of the data, the null hypotheses were tested for significant differences using chi square, multiple regression, phi, Cramer's V, and contingency coefficient.

Data Description: Tables 1.1 and 1.2 provide a description of the data and a comparison of the original population and questionnaire respondents. Academic students and females were the most likely to respond to the questionnaire. General students were least likely to respond.

Findings

I. Transcript Data: High School Educational Experience (Table 1.1 and 1.2)

Transcript data were collected for 7,890 individuals by guidance staff. Males and females were approximately even in the population. Three percent of the population were coded as special education students.

Distribution by Curriculum (1983-1990) (Table 2): During the period studied, graduates of approved vocational programs declined 32.5% while high school graduates in Berks County declined 5.7%. In 1983, graduates of approved vocational programs numbered 839 students, and by 1990 enrollment in these programs had dropped to 566 students, for an overall loss of 32.5%.

Within the two curricula groups, vocational and non-vocational, distribution of graduates changed significantly between 1983 and 1990. While the academic track increased 18.9%, the home school vocational track declined 43.0%. The general track declined 18.9% and the AVTS track declined 43.0%. When adjusting the percentage for student population decline, the overall increase in the academic track was 12% while the decline in the other programs was as follows: GEN - 3.3%. AVTS - 3.7%. HSVOC - 5%.

The changing distribution of students among curriculum types is the fundamental finding of this study; one which must be remembered when interpreting other findings. While significant attention has been given to the input of increased graduation requirements, less attention is typically paid to the "go to college" emphasis that has accompanied it. Yet this research would suggest that the most glaring difference between 1983 and 1990 graduates is the increased preference for the academic program typically taken in order to prepare for higher education.

Grade Point Average (GPA) (Table 3): The mean GPA for the population was 6.5. Girls were significantly higher than boys.

Academic students were significantly higher than any of the other three curriculums. The AVTS students were consistent in their GPAs across the three years of study as were academic students. However, both general and home school vocational students' GPAs have declined.

Total Credits Earned (Table 4): The average number of credits earned was 25.6 credits for grades 9-12. Females earned slightly more credits than males. This was true for all four curriculums. The academic students earned the most credits while the general students earned the least. The AVTS students earned only slightly more than the general students. There was an approximate growth of two credits toward graduation over the period of the study.

Total Vocational Credit (Table 4): At least one or more vocational credits were taken by all students. The 1990 academic females took the least amount of vocational credits (1.9). The AVTS males have experienced the greatest decline in vocational credits from 11.7 in 1983 to 7.6 in 1990. The 1986 district vocational males have had more vocational credits (8.3) than the AVTS males (7.6).

Total Math/Science Credits (Table 5): The total math and science credits have increased slightly from 1983 to 1990 (math 3.2 to 3.6 and science 2.9 to 3.5 credits). AVTS students earn the least number of math and science credits (2.7 and 2.3 credits respectively). General students completed on the average 3.0 and 2.7 credits respectively for math and science. Other than AVTS students where males and females take an approximately equal number of credits, males have consistently completed more math and science credits than females (3.5 - 3.2 compared to 3.3 -3.1 credits).

Self-Report of High School Curriculum (Table 10): The questionnaire asked individuals in the study to identify their program of study while in high school: ACA, GEN, AVTS, or HSVOC. This response was compared to a program of study designated by

guidance counselors after they reviewed each individual transcript. Table 10 illustrates that the graduate and counselor responses for curriculum taken were consistent for students enrolled in AVTS and HSVOC programs; however, eight percent of the general students perceived themselves as academic students while their counselors did not.

Influence on Career Decisionmaking (Table 15): For all curriculums, the most influential person on a student's career decision-making is an "other" (39.7%). The father is the second most influential person (22.1%), but the most influential on the son. The mother is the third most influential person, but the most influential on the daughter. The school guidance counselor had the least influence on the graduate's career decision (2.2%). The influence exerted on graduates over the years has been fairly consistent, but shows a decrease in a friend's influence and an increase in the academic teacher's influence. The academic teacher has minimal impact on an AVTS student while the vocational teacher has a significant impact.

Satisfaction with High School Preparation (Table 16): Overall, students were satisfied with the preparation they received for college or a career with 84% of the respondents indicating that they were either somewhat satisfied or very satisfied with the preparation they received. The most satisfied were the academic students (86.6%). The least satisfied were graduates of the general program (74.8%).

Those who responded affirmatively were then asked what program of study they would take. Responses varied markedly by curriculum type. General students indicated they would take either the academic program (46.8%) or the AVTS program (29%). AVTS students responded they would take the academic program (41.9%). The academic students that responded they would take another program indicated that they would take either the AVTS program (25.%) or high school vocational-technical program

(27.2%). As a further measure of satisfaction, graduates were asked "if you could repeat high school, would you choose a different program of study?" Twenty-three percent of the respondents indicated they would (see Table 16.1).

II. Questionnaire Data: Postsecondary Experience

Mobility (See Table 25.1):

Only 10% of the respondents had moved out of Pennsylvania. Fifty-seven percent of the respondents had not changed their address while 26% had moved within the greater Berks County area. Seven percent had moved to another part of the state. Graduates of the academic program were most likely to move out of the area (21%), while graduates of vocational programs were least likely to move out of the area (9%).

Present Status (See Tables 14.1, 14.2, 14.3): Graduates were asked to indicate what they are presently doing. As might be expected, the distribution of graduates among the 15 response alternatives varied markedly by year of graduation. Eighty-one percent of the 1983 graduates are working full-time. Only 1.5% indicated they were unemployed and 3% indicated they were homemakers. Two and one-half percent of the 1983 class indicated they were full-time students and an additional 13% indicated they were part-time students.

Reflecting the increased preference for the academic program by the 1990 class, 35% responded that they were full-time students with 32.5% coming from the academic program. Twenty-five percent indicated they were working full-time. Thirty-one percent of the students were working part-time and 2.5% were in the military. Two and one-half percent responded that they were unemployed.

III. Questionnaire Data: Higher Education Experience

Seventy-three percent of all respondents indicated they had attended some type of higher education since graduation.

Academic students (90.4%) were the most likely to attend higher education followed by general (50.4%), district Vo-Tech (46.5%) and AVTS (43.5%). Eighty-two percent of those who attended some form of higher education did so within the state (See Table 17.3).

Type of Institution Attended (See Table 17.2): During the period studied there was a growing preference for attending four-year colleges and a declining interest in a community college education. Between 1983 and 1990 the percentage of students who attended a four-year college after graduation increased 34% to 74.2% (from 55.3% in 1983). Interest in community colleges had declined from 7.7% in 1983 to 5.9% in 1990. Academic students were most likely to enter a four-year institution (79.6%). AVTS students were evenly distributed between two-year trade schools (25.8%), community colleges (11.5%), four-year colleges (11.5%); and other schools (46.1%).

Status in Program (See Table 17.4): Seventy-six percent of the 1983 graduating class indicated they completed their postsecondary education program. Only 16.5% responded that they had dropped out. Fourteen percent of the 1986 class responded that they had dropped out of their program.

An analysis of the programs by year of graduation revealed that the average number of years of postsecondary education were as follows: 1983 class - 2.3 years, 1986 class - 2.2 years, and 1990 class - .3 years. Students graduating from the academic program for the 1983 and 1986 classes had the following postsecondary experiences, 3.4 years and 3.2 years respectively. All other students averaged approximately one year of postsecondary education (See Table 17.5).

Sixty-five percent of the academic students from the 1983 class responded that they had completed four or more years of postsecondary education followed by General (13.7%), AVTS (7.88%), High School Vocational (7.81%). (See Table 17.6)

Interest in Further Training (Tables 23.1, 23.2): Over two-thirds of all graduates are interested in further training. Those students from an academic background would like more training than those from a vocational program.

IV. Questionnaire Data: Full-Time Employment:

The following data were obtained from questionnaire respondents who were working full-time.

Distribution by Industry Type (See Table 21): Respondents who were working full-time were asked to indicate in which of eight industry types they are employed. A significant decline from 1983 to 1990 in manufacturing employment was evidenced by the percentages employed (1983, 22.7% manufacturing to 12.1% manufacturing 1990). Employment in the services sector ranked second (12.1%, 1983, 15.2%, 1986 and 11.9%, 1990). As would be expected, employment in the food service area was highest for the 1990 class (14.8%) and declined as individuals were in the workforce for a longer period of time (1983, 4.3%).

Job Seeking Techniques (See Table 18): Respondents who were working full-time were asked how they found their present job. In all years of graduation, the informal job market, family/friends was the most common response, followed by newspaper ads.

Size of the Employer (See Table 24): Nationally, the majority of young workers are employed in firms of less than 100 employees (Gray and Wong, 1989); the same distribution was noted in the region studied. Twenty-four percent of the class of 1983 worked in firms of less than 20 employees. Fifty-four percent of all respondents worked for companies that employed less than 100 employees. Over 65% of the AVTS graduates worked for firms with less than 100 employees. As might be expected, recent graduates have a greater probability of being hired by small firms.

On the Job Training (See Table 22.1): Because of the assumption that high school graduates will be trained formally on the job,

and thus vocational education is unnecessary, graduates were asked to indicate what type of training they received. Only 29% of all respondents who were working full-time indicated that they had received any formal training. Fifty-five percent or more were taught what to do by another employee.

The likelihood of graduates getting formal employer provided training is a function of firm size and occupational group. The larger the firm, the more likely formal training will be provided. Employers providing formal training programs most frequently come from the services and banking sector (19.4%). The public sector, transportation and farming were least likely to provide formal training (6.8%, 2.7% and .8% respectively, see Table 22.3).

Commuting Distance (See Table 25): Thirty-seven percent of all the respondents working full-time travel less than five miles to work. This figure was relatively consistent across all curriculum types. Only 14.3% commute more than 20 miles. As might be expected, the 1990 class worked closest to their home (47% commute less than 5 miles followed by the 1983 class at 34.8% and the 1986 class at 34.3%).

Level of Employment (See Table 20): Respondents were asked to indicate what administrative level of employment they held. Forty-eight percent of all respondents were general employees. Twenty-eight percent responded that they were professionals followed by 14.1% who indicated that they were managers.

V. Questionnaire Data: Wage Rates

Graduates were asked to provide information from which weekly wage rates could be calculated. These wage rates provided a measure of the economic power of graduates as well as one indication of possible labor market advantages from pursuit of different curricula. The average weekly wage rate for all respondents who were working full-time was $398 (See Table 27).

Vocational students had a definite wage advantage over other curricula immediately upon graduation. As graduates aged and more graduated from higher education, this wage advantage evaporated. The weekly wage rate for academic graduates of the 1983 class was $499 followed by $425 for the AVTS graduate. The AVTS graduate reported the highest earnings for 1986 ($400 per week followed by academic $399 per week).

Studies conducted by Kenneth Gray, Associate Professor at Penn State found that labor market advantages to graduating from an academic program existed only if followed by going on to higher education. Academic students who did not go on to higher education earn less than graduates from all other curricula. Also of note, graduates of vocational education curricula who go on to higher education do not earn significantly more than their fellow vocational graduates who do not. Gray found that higher wages were related to being male, married, finishing college, working in large firms, and receiving formal training.

Table 1.1 -- PARTICIPATION IN SURVEY

School District	Transcript Data n	Transcript Data %	Questionnaire Data n	Questionnaire Data %
Antietam	201	2.6	93	2.6
Boyertown Area	1276	16.2	558	15.6
Brandywine Heights Area	312	4.0	166	4.6
Conrad Weiser Area	491	6.2	207	5.8
Daniel Boone Area	445	5.6	191	5.3
Exeter Township	541	6.9	235	6.6
Fleetwood Area	307	3.9	147	4.1
Governor Mifflin	884	11.2	360	10.1
Hamburg Area	390	4.9	173	4.8
Kutztown Area	393	5.0	196	5.5
Oley Valley	376	4.8	167	4.7
Schuylkill Valley	359	4.6	172	4.8
Tulpehocken Area	303	3.8	131	3.7
Twin Valley	423	5.4	183	5.1
Wilson	820	10.4	416	11.6
Wyomissing Area	369	4.7	184	5.1
TOTAL	**7890**	**100**	**3579**	**100**

* NOTE: Of 7890 potential questionnaire respondents, 3872 could not be reached because the postal forwarding order had expired and 57 had bad/incomplete addresses. Therefore, our potential population for the questionnaire was 3961 graduates. Our return rate was 90.4%

Table 1.2 -- PARTICIPATION IN SURVEY

	Transcript		Questionnaire	
	n	%	n	%
Year of Graduation				
1983	2783	35.3	1093	30.5
1986	2483	31.5	1129	31.6
1990	2624	33.2	1357	37.9
TOTAL	7890	100.0	3579	100.0
Sex				
Male	3924	49.7	1657	46.3
Female	3966	50.3	1922	53.7
TOTAL	7890	100.0	3579	100.0
Curriculum				
Academic	4033	51.1	2147	60.0
General	1788	22.7	596	16.7
AVTS	1238	15.7	505	14.1
HSVOC	831	10.5	331	9.2
TOTAL	7890	100.0	3579	100.0
Handicapped				
Yes	226	2.9	73	2.0
No	7664	97.1	3506	98.0
TOTAL	7890	100.0	3579	100.0

Table 2 - HIGH SCHOOL PROGRAM BY GENDER AND YEAR

PROGRAM	1983			1986			1990			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
ACADEMIC	600	667	1267	608	637	1245	711	795	1506	1919	2099	4018
% of Split	47.4	52.6	100	48.8	51.2	100	47.2	52.8	100	47.8	52.2	100
GENERAL	381	281	662	306	254	560	324	213	537	1011	748	1759
% of Split	57.6	42.4	100	54.6	45.4	100	60.3	39.7	100	57.5	42.5	100
AVTS	321	176	497	229	133	362	231	140	371	781	449	1230
% of Split	64.6	35.4	100	63.3	36.7	100	62.3	37.7	100	63.5	36.5	100
HSVOC	82	260	342	42	249	291	50	145	195	174	654	828
% of Split	24.0	76.0	100	14.4	85.6	100	25.6	74.4	100	21.0	79.0	100

CURRICULUM	1983		1986		1990		TOTAL	
	Total	%	Total	%	Total	%	Total	%
ACADEMIC	1267	45.8	1245	50.7	1506	57.8	4018	51.3
GENERAL	662	23.9	560	22.8	537	20.6	1759	22.5
AVTS	497	17.9	362	14.7	371	14.2	1230	15.7
HSVOC	342	12.4	291	11.8	195	7.4	828	10.5
TOTAL	2768	100.0	2458	100.0	2609	100.0	7835	100.0

Table 2.1 -- COMPARISON OF COUNSELOR AND STUDENT CURRICLUM PERCEPTION

	Questionnaire		Transcript	
	n	%	n	%
Academic	2089	58.6	4018	51.3
General	566	15.9	1759	22.5
AVTS	515	14.5	1230	15.7
HSVOC	394	11.1	828	10.6
TOTAL	3564	100.1	7835	100.1

Table 2.2 -- WHY STUDENTS DIDN'T ATTEND BERKS VOCATIONAL-TECHNICAL SCHOOL

By Curriculum:

	Academic		General		AVTS		HSVOC		TOTAL	
	n	%	n	%	n	%	n	%	n	%
Bus Ride Too Long	5	.2	12	2.5	3	6.7	1	.3	21	.7
Peer Influence	19	.9	23	4.8	2	4.4	7	2.2	51	1.8
Negative Image	185	8.9	97	20.0	5	1.1	35	11.2	322	11.1
Extra Curriculum	40	1.9	43	8.9	0	.0	17	5.4	100	3.4
Scheduling	18	.9	36	7.4	4	8.9	14	4.5	72	2.5
Credit Require	16	.8	29	6.0	0	.0	6	1.9	57	1.8
Parents	31	1.5	23	4.8	3	6.7	5	1.6	62	2.1
College	1682	81.3	97	20.0	14	31.1	32	10.2	1825	62.7
No Voc. Program	50	2.4	77	15.9	5	11.1	25	8.0	157	5.4
Voc. Program at H.S.	24	1.2	47	9.7	9	20.0	172	54.8	252	8.7

Chi Square 1811.873 ***= p<.01

By Sex:

	Male		Female	
	n	%	n	%
Bus Ride Too Long	11	.9	10	.6
Peer Influence	21	1.7	30	1.8
Negative Image	153	12.2	169	10.2
Extra Curriculum	48	3.8	52	3.1
Scheduling	32	2.6	40	2.4
Credit Require	23	1.8	28	1.7
Parents	35	2.8	27	1.6
College	809	64.6	1016	61.2
No Voc. Program	65	5.2	92	5.5
Voc. Program at H.S.	55	4.4	197	11.9

Chi Square 56.835 ***= p<.01

By Year of Graduation:

	1983		1986		1990	
	n	%	n	%	n	%
Bus Ride Too Long	6	.7	7	.8	8	.7
Peer Influence	24	2.8	10	1.1	17	1.5
Negative Image	130	14.9	87	9.6	105	9.3
Extra Curriculum	41	4.7	30	3.3	29	2.6
Scheduling	22	2.5	28	3.1	22	2.0
Credit Require	11	1.3	20	2.2	20	1.8
Parents	18	2.1	18	2.0	26	2.3
College	479	54.9	561	61.7	785	69.5
No Voc. Program	53	6.1	59	6.5	45	4.0
Voc. Program at H.S.	87	10.2	90	9.9	73	6.5

Chi Square 70.152 ***= p<.01

Table 2.3 -- WOULD MORE CAREER EDUCATION HAVE BEEN HELPFUL?

Yes	2509	70.6%
No	1045	29.4%

Chi Square	19.114	*** p .01	HSC
Chi Square	6.050	** p .05	SEX
Chi Square	33.778	*** p .01	Y.O.G.

WHEN:

	Elementary		Jr. High		10th		12th	
	n	%	n	%	n	%	n	%
By Curriculum:								
Academic	151	7.2	1079	51.5	839	40.1	25	1.2
General	46	7.9	335	57.3	190	32.5	14	2.4
AVTS	33	6.7	309	62.6	142	28.7	10	2.0
HSVOC	19	6.0	191	59.9	104	32.6	5	1.6
TOTAL								
		Chi Square	37.346		*** p<.01			
By Sex:								
Male	95	5.9	873	54.1	621	38.5	26	1.6
Female	154	8.2	1014	55.5	654	34.8	28	1.5
TOTAL	249	7.1	1914	54.8	1275	36.5	54	1.6
		Chi Square	10.053		** p<.05			
By Year of Graduation:		Chi .418						
1983	87	8.2	589	55.3	375	35.2	15	1.4
1986	77	7.0	602	54.8	398	36.2	22	2.0
1990	85	6.1	723	54.5	502	37.8	17	1.3
TOTAL								
		Chi Square	6.044					

Table 3 -- AVERAGE GRADE POINT AVERAGE

CURRICULUM	Year of Graduation 1983	1986	1990	TOTAL
ACADEMIC				
Male	7.1	6.9	7.2	7.1
Female	7.8	7.7	7.8	7.8
TOTAL	7.5	7.3	7.5	7.4
GENERAL				
Male	4.8	4.4	4.4	4.5
Female	5.3	5.0	4.9	5.1
TOTAL	5.0	4.7	4.6	4.8
AVTS				
Male	5.5	5.4	5.6	5.5
Female	6.1	6.2	6.1	6.1
TOTAL	5.7	5.7	5.8	5.7
HSVOC				
Male	5.6	4.9	5.0	5.2
Female	6.4	*	5.7	*
TOTAL	6.2	*	5.5	*
ALL				
Male	6.0	5.9	6.2	6.0
Female	6.8	*	6.9	*
TOTAL	6.4	*	6.5	*

* The calculation of the grade point average for female district vocational education students and total grade point averages were omitted due to missing data.

Table 4 -- TOTAL CREDITS TOWARDS GRADUATION

CURRICULUM	YEAR OF GRADUATION 1983 Total Credits	1983 Voc. Credits	1986 Total Credits	1986 Voc. Credits	1990 Total Credits	1990 Voc. Credits	TOTAL Total Credits	TOTAL Voc. Credits
ACADEMIC								
Male	25.3	2.1	26.0	2.2	26.8	2.2	26.1	2.1
Female	25.5	2.1	26.5	2.3	27.4	1.9	26.5	2.1
TOTAL	25.4	2.1	26.3	2.3	27.1	2.0	26.3	2.1
GENERAL								
Male	23.7	3.5	24.3	3.8	25.2	3.4	24.4	3.6
Female	24.1	3.6	24.6	3.6	25.6	4.0	24.7	3.7
TOTAL	23.9	3.5	24.4	3.7	25.3	3.7	24.5	3.6
AVTS								
Male	23.9	11.7	24.5	7.1	25.7	7.6	24.6	9.1
Female	24.0	7.4	24.7	7.4	26.0	7.7	24.8	7.5
TOTAL	23.9	10.2	24.6	7.2	25.8	7.6	24.7	8.5
HSVOC								
Male	24.4	8.1	25.7	8.3	26.5	8.2	25.3	8.2
Female	24.9	7.8	25.4	7.8	26.7	8.1	25.5	7.9
TOTAL	24.8	7.9	25.5	7.9	26.6	8.2	25.5	7.9
ALL								
Male	24.5	6.3	25.3	4.4	26.2	4.4	25.3	5.1
Female	24.9	4.8	25.7	4.7	26.9	4.3	25.8	4.6
TOTAL	24.7	5.5	25.5	4.6	26.5	4.3	25.6	4.8

Table 5 -- TOTAL MATH/SCIENCE CREDITS

CURRICULUM	YEAR OF GRADUATION 1983 Math	1983 Science	1986 Math	1986 Science	1990 Math	1990 Science	TOTAL Math	TOTAL Science
ACADEMIC								
Male	4.1	3.8	4.2	3.9	4.1	3.9	4.1	3.9
Female	3.8	3.6	3.9	3.7	4.0	3.8	3.9	3.7
TOTAL	3.9	3.7	4.1	3.8	4.0	3.9	4.0	3.8
GENERAL								
Male	2.9	2.6	3.0	2.7	3.3	3.2	3.1	2.8
Female	2.7	2.4	2.9	2.6	3.1	3.0	2.9	2.6
TOTAL	2.8	2.5	3.0	2.6	3.2	3.1	3.0	2.7
AVTS								
Male	2.7	2.0	2.9	2.1	2.7	2.9	2.7	2.3
Female	2.6	2.0	2.7	2.1	2.7	2.9	2.7	2.3
TOTAL	2.6	2.0	2.8	2.1	2.7	2.9	2.7	2.3
HSVOC								
Male	2.6	2.4	2.6	2.5	2.8	3.2	2.6	2.6
Female	2.1	2.0	3.2	2.0	2.5	3.0	2.6	2.2
TOTAL	2.2	2.1	3.1	2.1	2.6	3.1	2.6	2.3
ALL								
Male	3.3	3.0	3.6	3.2	3.6	3.6	3.5	3.2
Female	3.1	2.8	3.5	3.0	3.5	3.5	3.3	3.1
TOTAL	3.2	2.9	3.5	3.1	3.6	3.5	3.4	3.2

Table 6 -- HIGHEST MATH COURSE

	General Math n / %	Algebra I n / %	Geometry n / %	Algebra II n / %	Trigo-nometry n / %	Advanced Math n / %	TOTAL n / %
1983							
Academic	14/ 1.9	25/ 7.4	59/33.0	276/52.3	518/84.9	377/97.4	1269/45.7
General	302/41.0	121/35.8	68/38.0	130/24.6	40/ 6.6	6/ 1.6	667/24.0
AVTS	290/39.4	95/28.1	17/ 9.5	52/ 9.9	43/ 7.0	2/ .5	499/18.0
HSVOC	130/17.7	97/28.7	35/19.5	70/13.2	9/ 1.5	2/ .5	343/12.3
1986							
Academic	14/ 2.7	16/ 4.9	54/31.0	239/53.3	474/87.1	453/98.3	1250/50.5
General	218/41.8	136/41.5	62/35.6	118/26.3	30/ 5.5	6/ 1.3	470/23.0
AVTS	189/36.2	84/25.6	23/13.2	37/ 8.3	30/ 5.5	1/ .2	364/14.7
HSVOC	101/19.3	92/28.0	35/20.1	54/12.1	10/ 1.8	1/ .2	293/11.8
1990							
Academic	15/ 3.0	21/ 8.2	70/35.0	302/61.4	644/90.5	457/99.4	1509/57.6
General	204/41.0	119/46.3	77/38.5	107/21.8	33/ 4.6	2/ .4	542/20.7
AVTS	191/38.4	66/25.7	30/15.0	55/11.2	30/ 4.2	1/ .2	373/14.2
HSVOC	88/17.7	51/19.8	23/11.5	28/ 5.7	5/ .7	0/ 0.0	195/ 7.5

	1983	1986	1990	All Years
Academic	Trigonometry	Trigonometry	Trigonometry	Trigonometry
General	General Math	General Math	General Math	General Math
AVTS	General Math	General Math	General Math	General Math
HSVOC	General Math	General Math	General Math	General Math
ALL Students	General Math	Trigonometry	Trigonometry	

Table 7 -- HIGHEST SCIENCE COURSE

	General Science n / %	Chemistry n / %	Physics n / %	Advanced Science n / %	TOTAL n / %
1983					
Academic	126/ 8.8	295/70.2	443/90.8	406/91.2	1270/45.7
General	527/37.0	85/20.2	23/ 4.7	30/ 6.7	665/24.0
AVTS	464/32.6	15/ 3.6	14/ 2.9	5/ 1.1	498/17.9
HSVOC	307/21.6	25/ 6.0	7/ 1.4	4/ .9	343/12.4
TOTAL	1424/51.3	420/15.1	487/17.5	445/16.0	2776/100.0%
1986					
Academic	119/10.2	245/69.6	417/93.9	464/91.9	1245/50.4
General	446/38.1	70/19.9	21/ 4.7	32/ 6.3	569/23.0
AVTS	348/29.7	12/ 3.4	2/ .5	2/ .4	364/14.7
HSVOC	257/22.0	25/ 7.1	4/ .9	7/ 1.4	293/11.9
TOTAL	1170/47.4	352/14.3	444/18.0	505/20.4	2471/100.0%
1990					
Academic	103/10.6	381/67.6	491/93.4	532/95.2	1507/57.6
General	400/41.3	97/17.2	25/ 4.8	20/ 3.6	542/20.7
AVTS	316/32.6	47/12.6	7/ 1.3	3/ .5	373/14.3
HSVOC	149/15.4	39/ 6.9	3/ .6	4/ .7	195/ 7.5
TOTAL	968/36.9	564/21.5	526/20.0	559/21.3	2617/100.0%

	1983	1986	1990	All Years
Academic	Physics	Advanced Science	Advanced Science	Advanced Science
General	General Science	General Science	General Science	General Science
AVTS	General Science	General Science	General Science	General Science
District	General Science	General Science	General Science	General Science
ALL Students	General Science	General Science	General Science	?

Table 8 -- MARITAL STATUS OF GRADUATES

Distribution by Curriculum

	Single		Married		Separated/Divorced	
	n	%	n	%	n	%
Academic	1788	84.3	307	14.5	26	1.2
General	401	68.7	166	28.4	17	2.9
AVTS	355	71.9	117	23.7	22	4.5
HSVOC	201	61.3	112	34.2	15	4.6
TOTAL	2745	77.8	702	19.9	80	2.3

Chi Square 150.515 *** $p<.01$

Distribution by Year of Graduation

	Single		Married		Separated/Divorced	
	n	%	n	%	n	%
1983	544	50.2	481	44.4	58	5.4
1986	895	80.4	196	17.6	22	2.0
1990	1306	98.1	25	1.9	0	0
TOTAL	2745	77.8	702	19.9	80	2.3

Chi Square 800.578 *** $p<.01$

Table 9 -- RACE

By Curriculum:

	American Indian		Asian		Black		Hispanic		White	
	n	%	n	%	n	%	n	%	n	%
Academic	45	2.1	31	1.5	11	.5	9	.4	2040	95.5
General	13	2.2	9	1.5	3	.5	0	0	568	95.8
AVTS	10	2.0	3	.6	7	1.4	3	.6	480	95.4
HSVOC	6	1.8	0	0	1	.3	0	0	323	97.9
TOTAL	74	2.1	43	1.2	22	.6	12	.3	3411	95.8

Chi Square 17.873

By Sex:

	American Indian		Asian		Black		Hispanic		White	
	n	%	n	%	n	%	n	%	n	%
Male	27	1.6	21	1.3	13	.8	7	.4	1581	95.9
Female	47	2.5	22	1.2	9	.5	5	.3	1830	95.7
TOTAL	74	2.1	43	1.2	22	.6	12	.3	3411	95.8

Chi Square 5.128

By Year of Graduation:

	American Indian		Asian		Black		Hispanic		White	
	n	%	n	%	n	%	n	%	n	%
1983	27	2.5	2	.2	4	.4	1	.1	1058	96.9
1986	28	2.5	17	1.5	6	.5	4	.4	1067	95.1
1990	19	1.4	24	1.8	12	.9	7	.5	1286	95.4
TOTAL	74	2.1	43	1.2	22	.6	12	.3	3411	95.8

Chi Square 25.068 ***= p<.01

Table 10 - TYPE OF CURRICULUM TAKEN

By Year of Graduation:

CURRICULUM	1983		1986		1990		TOTAL	
	n	%	n	%	n	%	n	%
Academic	561	51.4	648	57.7	880	65.2	2089	58.6
General	211	19.3	180	16.0	175	13.0	566	15.9
AVTS	167	15.3	163	14.5	185	13.7	515	14.5
HSVOC	152	13.9	132	11.8	110	8.2	394	11.1

Chi Square 55.272 *** $p < .01$

By Sex:

CURRICULUM	Male		Female		TOTAL	
	n	%	n	%	n	%
Academic	950	57.4	1139	59.6	2089	58.6
General	305	18.4	261	13.7	566	15.9
AVTS	327	19.8	188	9.8	515	14.5
HSVOC	72	4.4	322	16.9	394	11.1

Chi Square 5529.566 *** $p < .01$

Table 11 -- CHANGE OF RESIDENCE

By Curriculum:

CURRICULUM	No Move		Within Area		In Pennsylvania		Out of State	
	n	%	n	%	n	%	n	%
Academic	1304	61.1	375	17.6	181	8.5	274	12.8
General	297	49.9	228	38.3	30	5.0	40	6.7
AVTS	277	55.1	179	35.6	24	4.8	23	4.6
HSVOC	153	46.2	149	45.0	18	5.4	11	3.3
TOTAL	2031	57.0	931	26.1	253	7.1	348	9.8

Chi Square 243.311 ***= p<.01

By Year of Graduation:

	No Move		Within Area		In Pennsylvania		Out of State	
	n	%	n	%	n	%	n	%
1983	271	24.9	527	48.4	114	10.5	177	16.3
1986	605	53.8	310	27.6	86	7.6	124	11.0
1990	1155	85.6	94	7.0	53	3.9	47	3.5
TOTAL	2031	57.0	931	26.1	253	7.1	348	9.8

Chi Square 930.145 ***= p<.01

By Sex:

	No Move		Within Area		In Pennsylvania		Out of State	
	n	%	n	%	n	%	n	%
Male	1027	62.2	348	21.1	96	5.8	179	10.9
Female	1004	52.5	583	30.5	157	8.2	169	8.8
TOTAL	2031	59	931	26.1	253	7.1	348	9.8

Chi Square 55.462 ***= p<.01

Table 12 -- YEARS OF EDUCATION OF FATHER

By Curriculum:

CURRICULUM	Less Than 12		12		13-16		17+	
	n	%	n	%	n	%	n	%
Academic	230	10.9	769	36.3	711	33.6	408	19.3
General	186	32.3	258	44.8	109	18.9	23	4.0
AVTS	161	32.4	241	48.5	78	15.7	17	3.4
HSVOC	109	34.1	171	53.4	34	10.6	6	1.9
TOTAL	686	19.5	1459	41.0	932	26.6	454	12.9

Chi Square 509.325 ***= p<.01

By Sex:

	Less Than 12		12		13-16		17+	
	n	%	n	%	n	%	n	%
Male	297	18.2	667	41.0	452	27.8	213	13.1
Female	389	20.7	772	41.0	480	25.5	241	12.8
TOTAL	686	19.5	1459	41.0	932	26.6	454	12.9

Chi Square 4.359

By Year of Graduation:

	Less Than 12		12		13-16		17+	
	n	%	n	%	n	%	n	%
1983	267	24.9	463	43.1	235	21.9	109	10.2
1986	234	21.2	457	41.4	277	25.1	136	12.3
1990	185	13.9	519	38.9	420	31.5	209	15.7
TOTAL	686	19.5	1459	41.0	932	26.6	454	12.9

Chi Square 78.154 ***= p<.01

Table 13 -- YEARS OF EDUCATION OF MOTHER

By Curriculum:

CURRICULUM	Less Than 12		12		13-16		17+	
	n	%	n	%	n	%	n	%
Academic	151	7.1	969	45.8	763	36.1	233	11.0
General	134	22.9	334	57.1	99	16.9	18	3.1
AVTS	104	20.8	315	63.0	74	14.8	7	1.4
HSVOC	81	24.9	204	62.6	36	11.0	5	1.5
TOTAL	470	13.3	822	51.7	972	27.6	263	7.5

Chi Square 424.090 *** $p<.01$

By Sex:

	Less Than 12		12		13-16		17+	
	n	%	n	%	n	%	n	%
Male	191	11.7	831	53.9	441	27.0	121	7.4
Female	279	14.7	941	49.7	531	28.1	142	7.5
TOTAL	470	13.3	822	51.7	972	27.6	263	7.5

Chi Square 9.495 *** $p<.05$

By Year of Graduation:

	Less Than 12		12		13-16		17+	
	n	%	n	%	n	%	n	%
1983	185	17.2	594	55.1	250	23.2	49	4.6
1986	156	14.0	594	53.4	290	26.1	72	6.5
1990	129	9.7	634	47.4	432	32.3	142	10.6
TOTAL	470	13.3	822	51.7	972	27.6	263	7.5

Chi Square 84.615 *** $p<.01$

Table 14.1 -- CURRENT STUDENT STATUS

By Curriculum:

	Academic		General		AVTS		HSVOC		TOTAL	
	n	%	n	%	n	%	n	%	n	%
Working Full Time	727	34.0	320	53.7	318	62.8	193	58.7	1556	43.7
Work FT / PT Job	83	3.9	37	6.2	35	7.0	24	7.3	179	5.0
Work FT / PT Student	133	6.2	34	5.7	24	4.8	22	6.7	213	6.0
Work PT / PT Student	32	1.5	12	2.0	6	1.2	4	1.2	54	1.5
Work PT / Seeking Employment	37	1.7	11	1.9	12	2.4	10	3.0	70	2.0
Work PT / Not Seeking	23	1.1	13	2.2	13	2.6	9	2.7	58	1.6
Self Employed	29	1.4	18	3.0	20	4.0	13	4.0	80	2.2
FT Student / No Work	554	25.9	27	4.5	12	2.4	11	3.3	604	16.9
FT Student / PT Work	423	19.8	47	7.9	21	4.2	15	4.6	506	14.2
Armed Forces	39	1.8	22	3.7	17	3.4	3	.9	81	2.3
Homemaker	14	.7	24	4.0	6	1.2	16	4.9	60	1.7
Health Problems	2	.1	8	1.3	4	.8	0	0.0	14	.4
Unemployed / Looking	33	1.5	21	3.5	12	2.4	9	2.7	75	2.1
Unemployed / Not Looking	8	.4	2	.4	5	1.0	0	0.0	15	.4

Chi Square 648.56[illegible] ***= p<.01

Table 14.2 -- CURRENT STUDENT STATUS

By Gender:

	Male		Female		TOTAL	
	n	%	n	%	n	%
Working Full Time	733	44.3	823	43.1	1556	43.7
Work FT / PT Job	85	5.1	94	4.9	179	5.0
Work FT / PT Student	103	6.2	110	5.8	213	6.0
Work PT / PT Student	22	1.3	32	1.7	54	1.5
Work PT / Seeking Employment	21	1.3	49	2.6	70	2.0
Work PT / Not Seeking	6	.4	52	2.7	58	1.6
Self Employed	55	3.3	25	1.3	80	2.2
FT Student / No Work	274	16.6	330	17.3	604	16.9
FT Student / PT Work	232	14.0	274	14.3	506	14.2
Armed Forces	66	4.0	15	.8	81	2.3
Homemaker	5	.3	55	2.9	60	1.7
Health Problems	6	.4	8	.4	14	.4
Unemployed / Looking	37	2.2	38	2.0	75	2.1
Unemployed / Not Looking	9	.5	6	.3	15	.4

Chi Square 132.188 *** $p<.01$

Table 14.3 -- CURRENT STUDENT STATUS

By Year of Graduation:

	1983		1986		1990		TOTAL	
	n	%	n	%	n	%	n	%
Working Full Time	680	62.3	593	52.9	283	20.9	1556	43.7
Work FT / PT Job	89	8.2	54	4.8	36	2.7	179	5.0
Work FT / PT Student	117	10.7	66	5.9	30	2.2	213	6.0
Work PT / PT Student	5	.5	17	1.5	32	2.4	54	1.5
Work PT / Seeking Employment	13	1.2	27	2.4	30	2.2	70	2.0
Work PT / Not Seeking	24	2.2	19	1.7	15	1.1	58	1.6
Self Employed	42	3.9	31	2.8	7	.5	80	2.2
FT Student / No Work	29	2.7	98	8.7	477	36.3	604	16.9
FT Student / PT Work	21	1.9	125	11.2	360	26.6	506	14.2
Armed Forces	16	1.5	31	2.8	34	2.5	81	2.3
Homemaker	33	3.0	19	1.7	8	.6	60	1.7
Health Problems	5	.5	2	.2	7	.5	14	.4
Unemployed / Looking	16	1.5	33	2.9	26	1.9	75	2.1
Unemployed / Not Looking	1	.1	6	.5	8	.6	15	.4

Chi Square 1186.412 ***= $p<.01$

Table 15 -- MOST INFLUENTIAL PERSON IN CAREER DECISION

	Father		Mother		Friend		Academic Teacher		Vocational Instructor		Counselor		OTHER	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
By Curriculum:														
Academic	560	26.6	463	21.9	135	6.4	143	6.8	11	.5	50	2.4	750	35.5
General	87	15.0	82	14.1	59	10.1	31	5.3	8	1.4	8	1.4	307	52.8
AVTS	87	17.7	55	11.2	46	9.3	2	.4	94	19.1	14	2.8	195	39.6
HSVOC	41	12.7	63	19.6	34	10.6	21	6.5	15	4.7	6	1.9	142	44.1
TOTAL	775	22.1	663	18.9	274	7.8	197	5.6	128	3.7	18	2.2	1394	39.7
				Chi Square 551.903			*** p<.01							
By Sex:														
Male	438	26.9	254	15.6	124	7.6	77	4.7	70	4.3	33	2.0	630	38.8
Female	337	17.9	409	21.7	150	8.0	120	6.4	58	3.1	45	2.4	764	40.6
TOTAL	775	22.1	663	18.9	274	7.8	197	5.6	128	3.7	18	2.2	1394	39.7
				Chi Square 58.596			*** p<.01							
By Year of Graduation: Chi .424														
1983	237	22.2	192	18.0	78	9.2	59	5.5	35	3.3	22	2.1	423	39.7
1986	240	21.6	211	19.0	94	8.5	55	5.0	42	3.8	22	2.0	446	40.2
1990	298	22.4	260	19.5	82	6.2	83	6.2	51	3.8	34	2.6	525	39.4
TOTAL	775	22.1	663	18.9	274	7.8	197	5.6	128	3.7	18	2.2	1394	39.7
				Chi Square 12.272										

Table 16 - SATISFACTION WITH PREPARATION FOR COLLEGE/CAREER

By Curriculum:

	Not Satisfied		Somewhat Satisfied		Very Satisfied	
	n	%	n	%	n	%
Academic	264	12.5	1082	51.1	772	36.5
General	135	25.1	317	59.0	85	15.8
AVTS	82	19.1	246	57.2	102	23.7
HSVOC	47	15.4	171	56.1	87	28.5
TOTAL	528	15.6	1816	53.6	1046	30.9

Chi Square 123.332 *** $p<.01$

By Sex:

	Not Satisfied		Somewhat Satisfied		Very Satisfied	
	n	%	n	%	n	%
Male	261	16.9	838	54.3	445	28.8
Female	267	14.5	978	53.0	601	32.6
TOTAL	528	15.6	1816	53.6	1046	30.9

Chi Square 7.281 *** $p<.05$

By Year of Graduation: Chi .089

	Not Satisfied		Somewhat Satisfied		Very Satisfied	
	n	%	n	%	n	%
1983	167	16.3	544	52.9	317	30.8
1986	185	17.3	549	51.4	335	31.3
1990	176	13.6	723	55.9	394	30.5
TOTAL	528	15.6	1816	53.6	1046	30.9

Chi Square 8.083

Table 16.1 -- NUMBER OF GRADUATES WHO WOULD TAKE A DIFFERENT HIGH SCHOOL PROGRAM

Yes 22.8% No 77.2%

	Academic		General		AVTS		HSVOC		Different Vo-Tech	
	n	%	n	%	n	%	n	%	n	%
By Curriculum:										
Academic	92	38.5	18	7.5	61	25.5	65	27.2	3	1.3
General	137	46.8	3	1.0	85	29.0	63	21.5	5	1.7
AVTS	77	41.9	3	1.6	6	3.3	33	17.9	65	35.3
HSVOC	56	56.6	0	0.0	32	32.3	11	11.1	0	0.0
			Chi Square 265.931		*** = $p<.01$					
By Sex:										
Male	184	45.1	15	3.7	95	23.3	61	15.0	53	13.0
Female	178	43.7	9	2.2	89	21.9	111	27.3	20	4.9
			Chi Square 31.247		*** = $p<.01$					
By Graduation:										
1983	152	47.1	6	1.9	75	23.2	59	18.3	31	9.6
1986	119	45.4	8	3.1	60	22.9	54	20.6	21	8.0
1990	91	39.6	10	4.4	49	21.3	59	25.7	21	9.1
			Chi Square 8.799							

Table 17.1 -- POST SECONDARY EDUCATION

Have you attended school since graduation?

	Yes		No	
	n	%	n	%
By Curriculum				
Academic	1931	90.4	206	9.6
General	296	50.4	291	49.6
AVTS	216	43.5	281	56.5
HSVOC	151	46.5	174	53.5
TOTAL	2594	73.2	952	26.8
Chi Square 817.567		*** = $p < .01$		
By Sex				
Male	1183	72.1	457	27.9
Female	1411	74.0	495	26.0
TOTAL	2594	73.2	952	26.8
Chi Square 1.612				
By Year of Graduation				
1983	804	74.2	280	25.8
1986	840	74.9	282	25.1
1990	950	70.9	390	29.1
TOTAL	2594	73.2	952	26.8
Chi Square 8.083				

Table 17.2 -- POST SECONDARY EDUCATION

TYPE OF SCHOOL	2-Year Trade		Community College		2-Year Branch		4-Year College		Other	
	n	%	n	%	n	%	n	%	n	%
By Curriculum:										
Academic	93	4.8	76	4.0	58	3.0	1530	79.6	166	8.6
General	71	24.2	50	17.1	13	4.4	77	26.3	82	28.0
AVTS	56	25.8	25	11.5	11	5.1	25	11.5	100	46.1
HSVOC	55	36.4	22	4.6	7	4.6	26	17.2	41	27.2
TOTAL	275	10.6	175	6.7	89	3.4	1658	64.2	389	15.1
			Chi Square	868.193		*** = $p < .01$				
By Sex:										
Male	132	11.2	70	5.9	57	4.8	743	62.9	179	15.2
Female	143	10.2	103	7.3	32	2.3	915	65.2	210	15.0
TOTAL	275	10.6	175	6.7	89	3.4	1658	64.2	389	15.1
			Chi Square	15.110		*** = $p < .01$				
By Year of Graduation:										
1983	117	14.5	62	7.7	33	4.1	446	55.3	148	18.4
1986	95	11.4	55	6.6	26	3.1	509	61.3	146	17.6
1990	63	6.7	56	5.9	30	3.2	703	74.2	75	10.0
TOTAL	275	10.6	175	6.7	89	3.4	1658	64.2	389	15.1
			Chi Square	80.601		*** = $p < .01$				

Table 17.3 -- POST SECONDARY EDUCATION

Was the school out of state?

	Yes		No	
	n	%	n	%
By Curriculum				
Academic	364	18.7	1580	81.3
General	49	15.8	262	84.2
AVTS	41	18.4	182	81.6
HSVOC	21	13.4	136	86.6
TOTAL	475	18.0	2160	82.0
Chi Square 4.043				
By Sex				
Male	254	21.0	957	79.0
Female	221	15.5	1203	84.5
Chi Square 13.178		***= $p<.01$		
By Year of Graduation				
1983	142	17.2	684	82.8
1986	167	19.8	675	80.2
1990	166	17.2	801	82.8
Chi Square 2.735				

Table 17.4 -- PROGRAM STATUS

	Completed		Enrolled Full Time		Enrolled Part Time		Not Attending	
	n	%	n	%	n	%	n	%
By Curriculum:								
Academic	843	43.2	885	45.3	56	2.9	69	8.7
General	133	45.2	78	26.5	31	10.5	52	17.7
AVTS	116	53.3	43	19.7	27	12.4	32	14.2
HSVOC	81	52.6	26	16.9	15	9.7	32	20.8
TOTAL	1173	44.8	1032	39.4	129	4.9	285	10.9
			Chi Square 183.335		*** $p<.01$			
By Sex:								
Male	538	44.8	466	38.8	70	5.8	127	10.6
Female	635	44.8	566	39.9	59	4.2	158	11.1
TOTAL	1173	44.8	1032	39.4	129	4.9	285	10.9
			Chi Square 4.069					
By Year of Graduation:								
1983	621	76.6	13	1.6	43	5.3	134	16.5
1986	515	61.0	161	19.1	45	5.3	123	14.6
1990	37	3.8	858	89.0	41	4.3	28	2.9
TOTAL	1173	44.8	1032	39.4	129	4.9	285	10.9
			Chi Square 1670.025		*** $p<.01$			

Table 17.5 -- YEARS OF POST SECONDARY EDUCATION

CURRICULUM	Years of Graduation 1983	1986	1990	All
Academic				
Male	3.4	3.1	.4	2.1
Female	3.4	3.2	.4	2.0
TOTAL	3.4	3.2	.4	2.1
General				
Male	1.3	1.0	.2	.9
Female	1.0	1.1	.1	.8
TOTAL	1.1	1.1	.2	.8
AVTS				
Male	1.0	1.0	.1	.7
Female	.7	.6	.1	.4
TOTAL	.9	.8	.1	.6
HSVOC				
Male	1.3	1.0	.2	.9
Female	1.1	.7	.1	.7
TOTAL	1.1	.8	.1	.7
All				
Male	2.3	2.3	.3	1.6
Female	2.3	2.2	.3	1.5
TOTAL	2.3	2.2	.3	1.5

Table 17.6 -- NUMBER OF YEARS OF EDUCATION

By Curriculum:

	Number of Years of Education													
	0		1		2		3		4		5+		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
1983														
Academic	69	11.86	34	5.84	64	11.00	33	5.67	235	40.38	147	25.26	582	53.25
General	118	54.13	34	15.60	25	11.47	11	5.05	20	9.17	10	4.59	218	19.95
AVTS	102	61.82	25	15.15	17	10.30	8	4.85	10	6.06	3	1.82	165	15.10
HSVOC	63	49.22	21	16.41	30	23.44	4	3.13	7	5.47	3	2.34	128	11.71
TOTAL	352	32.20	114	10.43	136	12.44	56	5.12	272	24.89	163	14.91	1093	100.00

Chi Square 415.116 ***= p<.01

1986														
Academic	74	11.30	36	5.50	70	10.69	56	8.55	388	59.24	31	4.73	655	58.02
General	113	55.67	25	12.32	31	15.27	14	6.90	17	8.37	3	1.48	203	17.98
AVTS	97	61.01	24	15.09	22	13.84	7	4.40	9	5.66	0	0.00	159	14.08
District	74	66.07	9	8.04	19	16.96	3	2.68	4	3.57	3	2.68	112	9.92
TOTAL	358	31.71	94	8.33	142	12.58	80	7.09	418	37.02	37	3.28	1129	100.00

Chi Square 1129 ***= p<.01

Table 18 -- HOW GRADUATES FOUND PRESENT JOB

By Curriculum:

	Academic		General		AVTS		HSVOC	
	n	%	n	%	n	%	n	%
Co-op	18	1.8	9	2.0	31	7.3	24	9.0
Counselor	1	.1	3	.7	3	.7	1	.4
Teacher	7	.7	2	.5	3	.7	5	1.9
Family / Friend	248	24.1	166	37.1	172	40.4	84	31.6
Newspaper	207	20.1	98	21.9	73	17.1	58	21.8
State Employ	5	.5	5	1.1	7	1.6	3	1.1
Private Employ	42	4.1	7	1.6	11	2.6	9	3.4
JTPA	1	.1	2	.5	1	.2	1	.4
College Placement	102	9.9	12	2.7	6	1.4	9	3.4
Myself	232	22.5	91	20.4	84	19.7	40	15.0
Other	167	16.2	52	11.6	35	8.2	32	12.0

Chi Square 182.602 ***= p<.01

By Sex:

	Female		Male		TOTAL	
	n	%	n	%	n	%
Co-op	52	4.6	30	2.9	82	3.8
Counselor	3	.3	5	.5	8	.4
Teacher	11	1.0	6	.6	17	.8
Family / Friend	284	25.3	386	36.9	670	30.9
Newspaper	272	24.2	164	15.7	436	20.1
State Employ	8	.7	12	1.2	20	.9
Private Employ	49	4.4	20	1.9	69	3.2
JTPA	4	.4	1	.1	5	.2
College Placement	64	5.7	65	6.2	129	6.0
Myself	228	20.3	219	20.9	447	20.6
Other	147	13.1	139	13.3	286	13.2

Chi Square 62.837 ***= p<.01

By Year of Graduation:

	1983		1986		1990		TOTAL	
	n	%	n	%	n	%	n	%
Co-op	13	1.4	32	4.0	37	8.8	82	3.8
Counselor	1	.1	2	.3	5	1.2	8	.4
Teacher	7	.7	7	.9	3	.7	17	.8
Family / Friend	265	27.9	246	30.8	139	38.0	670	30.9
Newspaper	204	21.5	167	20.9	65	15.5	430	20.1
State Employ	11	1.2	5	.6	4	1.0	20	.9
Private Employ	37	4.0	28	3.5	4	1.0	69	3.2
JTPA	1	.1	3	.4	1	.2	5	.2
College Placement	73	7.9	55	6.9	1	.2	129	6.0
Myself	222	23.4	140	17.5	85	20.3	447	20.6
Other	116	12.2	115	14.4	55	13.1	286	13.2

Chi Square 116.763 ***= p<.01

Table 19 -- AVERAGE NUMBER OF FULL TIME JOBS HELD

CURRICULUM	Years of Graduation 1983	1986	1990	All
Academic				
Male	1.8	1.0	.2	.9
Female	1.9	1.0	.2	.9
TOTAL	1.8	1.0	.2	.9
General				
Male	2.4	1.8	.7	1.7
Female	2.4	1.8	.5	1.7
TOTAL	2.4	1.8	.7	1.7
AVTS				
Male	2.6	1.9	.8	1.8
Female	2.3	2.0	.8	1.7
TOTAL	2.5	1.9	.8	1.7
HSVOC				
Male	2.5	1.5	.8	1.8
Female	2.2	1.9	.7	1.7
TOTAL	2.3	1.8	.8	1.7
All				
Male	2.1	1.3	.4	1.3
Female	2.1	1.4	.3	1.2
TOTAL	2.1	1.4	.4	1.2

Table 20 -- LEVEL OF CURRENT JOB

	2-Year Owner		Pro-fessional		Manager		Prof. Auxiliary		General Employee	
	n	%	n	%	n	%	n	%	n	%
By Curriculum:										
Academic	23	2.2	433	42.1	157	15.3	65	6.3	351	34.1
General	20	4.5	65	14.6	57	12.8	25	5.6	279	62.6
AVTS	19	4.4	82	19.2	55	12.9	29	6.8	243	56.8
HSVOC	10	3.8	27	10.3	37	14.1	25	9.5	164	62.4
TOTAL	72	3.3	607	28.0	306	14.1	144	6.7	1037	47.9
			Chi Square		235.728		***= p<.01			
By Sex:										
Male	54	5.2	295	28.1	142	13.5	38	3.6	520	49.6
Female	18	1.6	312	27.9	164	14.7	106	9.5	517	46.3
			Chi Square		50.092		***= p<.01			
By Year of Graduation:										
1983	33	3.5	334	36.3	165	17.4	63	6.7	342	36.1
1986	28	3.5	229	28.5	112	13.9	55	6.8	380	47.3
1990	11	2.7	34	8.2	29	7.0	26	6.3	315	75.9
			Chi Square		200.221		***= p<.01			

Table 21 -- TYPE OF WORK EMPLOYER DOES

By Curriculum:

	Academic		General		AVTS		HSVOC	
	n	%	n	%	n	%	n	%
Manufacturing	160	15.8	81	19.5	94	22.5	45	17.1
Construction	44	4.3	52	11.7	55	13.2	10	3.8
Services	138	13.6	51	11.4	38	9.1	56	21.3
Food Service	67	6.6	43	9.6	29	7.0	26	9.9
Transportation	27	2.7	13	2.9	39	9.4	5	1.9
Farming	13	1.3	10	2.2	11	2.6	21	8.0
Health	133	13.1	28	6.3	25	6.0	15	5.7
Public Sector	120	11.8	17	3.8	8	1.9	10	3.8
Other	314	30.9	145	32.5	118	28.3	75	28.5
	Chi Square		243.508		*** $p<.01$			

By Sex:

	Male		Female		TOTAL	
	n	%	n	%	n	%
Manufacturing	234	23.0	148	13.4		
Construction	146	14.1	15	1.3		
Services	80	7.7	203	18.3		
Food Service	75	7.3	90	8.1		
Transportation	67	6.5	17	1.5		
Farming	43	4.2	12	1.1		
Health	26	2.5	175	15.8		
Public Sector	49	4.7	106	9.6		
Other	309	29.9	343	30.9		
	Chi Square	360.577		*** $p<.01$		

By Year of Graduation:

	1983		1986		1990		TOTAL	
	n	%	n	%	n	%	n	%
Manufacturing	212	22.7	124	15.6	50	12.1	386	18.0
Construction	64	6.8	57	7.2	40	9.7	161	7.5
Services	113	12.1	121	15.2	49	11.9	283	13.2
Food Service	40	4.3	64	8.1	61	14.8	165	7.7
Transportation	30	3.2	29	3.7	25	6.1	84	3.9
Farming	18	1.9	22	2.8	15	3.6	55	2.6
Health	99	10.6	85	10.7	17	4.1	201	9.4
Public Sector	97	10.4	49	6.2	9	2.2	155	7.2
Other	262	28.0	243	30.6	147	35.6	652	30.4
	Chi Square		128.847		*** $p<.01$			

Table 22.1 -- HOW ON-THE-JOB TRAINING WAS PROVIDED

By Curriculum:

	Formal Training		Supervisor		Co-Workers		No Training	
	n	%	n	%	n	%	n	%
Academic	336	33.8	224	22.6	265	26.7	168	16.9
General	126	28.6	118	26.8	136	30.9	60	13.6
AVTS	96	23.8	108	26.8	137	34.0	62	15.4
HSVOC	47	18.2	70	27.1	112	43.4	29	10.2
TOTAL	605	28.9	520	24.8	650	31.0	319	15.2
	Chi Square		51.332		*** $p<.01$			

By Sex: Chi .198

	Formal Training		Supervisor		Co-Workers		No Training	
	n	%	n	%	n	%	n	%
Male	296	29.4	249	24.7	326	32.8	137	13.6
Female	309	28.5	271	25.0	324	29.8	182	16.8
TOTAL	605	28.9	520	24.8	650	31.0	319	15.2
	Chi Square		4.665					

By Year of Graduation:

	Found Training		Supervisor		Co-Workers		No Training	
	n	%	n	%	n	%	n	%
1983	257	28.0	232	25.2	266	28.9	164	17.9
1986	242	31.2	178	22.9	242	31.2	114	14.7
1990	106	26.6	110	27.6	142	35.6	41	10.3
TOTAL	605	28.9	520	24.8	650	31.0	319	15.2
	Chi Square		19.489		*** $p<.01$			

Table 22.2 -- GRADUATE'S EDUCATIONAL LEVEL

TYPE OF TRAINING	High School n / %	Community College n / %	College Graduate n / %	TOTAL n / %
Formal	217/22.8	177/34.0	34/26.0	428/26.7
Supervisor	278/29.2	99/19.0	27/20.6	404/25.2
Co-Worker	344/36.1	164/31.5	29/22.1	537/33.5
On-Job-Training	113/11.9	81/15.6	41/31.3	235/14.7
	Chi Square	68.644	*** $p<.01$	

SIZE OF BUSINESS	High School n / %	Community College n / %	College Graduate n / %	TOTAL n / %
1 - 19	360/36.6	175/32.1	16/11.7	551/33.1
20 - 99	257/26.1	112/20.5	22/16.1	391/23.5
100 - 499	186/18.9	115/21.1	39/28.5	340/20.4
500+	180/18.3	144/26.4	60/43.8	384/23.1
	Chi Square	74.427	*** $p<.01$	

Table 22.3 -- TYPE OF INDUSTRY TRAINING

INDUSTRY SECTOR	Formal n / %	Supervisor n / %	Co-Worker n / %	No On-Job-Training n / %	TOTAL n / %
Manufacturing	80/13.5	109/21.5	150/23.6	37/12.0	376/18.4
Construction	24/ 4.1	54/10.7	58/ 9.1	15/ 4.9	151/ 7.4
Services/Banking	115/19.4	68/13.4	69/10.9	20/ 6.5	272/13.3
Food Service	45/ 7.6	39/ 7.7	57/ 9.0	18/ 5.8	159/ 7.8
Transportation	16/ 2.7	17/ 3.4	29/ 4.6	18/ 5.8	80/ 3.9
Farming	5/ .8	22/ 4.4	19/ 3.0	5/ 1.6	51/ 2.5
Health Occupations	90/15.2	29/ 5.7	30/ 4.7	42/13.6	191/ 9.3
Public Sector	40/ 6.8	17/ 3.4	33/ 5.2	56/ 18.1	146/ 7.1
Other	178/30.0	151/29.8	191/30.0	98/31.7	618/30.2

Chi Square 217.733 *** = $p < .01$

Table 22.4 -- REQUEST FOR TRAINING

SIZE OF BUSINESS	Yes n / %	No n / %
1 - 19	438/70.1	187/29.9
20 - 99	412/79.1	109/20.9
100 - 499	374/80.3	92/19.7
500+	452/84.8	81/15.2
TOTAL	1676/78.1	469/21.9

Chi Square 39.109 ***= $p<.01$

Table 22.5 -- SCHOOL ATTENDED

INDUSTRY	2-Year Business n / %	Community College n / %	2-Year College n / %	4-Year College n / %	Other n / %	TOTAL n / %
Manufacturing	43/22.3	17/14.5	10/18.2	99/14.7	40/14.1	209/15.8
Construction	12/ 6.2	14/12.0	4/ 7.3	16/ 2.4	33/11.6	79/ 6.0
Services/Banking	25/13.0	17/14.5	5/ 9.1	114/16.9	40/14.1	201/15.2
Food Service	5/ 2.6	10/ 8.6	11/20.0	38/ 5.7	12/ 4.2	76/ 5.8
Transportation	13/ 6.4	4/ 3.4	1/ 1.8	7/ 1.0	18/ 6.3	43/ 3.3
Farming	7/ 3.6	2/ 1.7	3/ 5.5	5/ .7	3/ 1.1	20/ 1.5
Health Occupations	21/10.9	15/12.8	4/ 7.3	62/ 9.2	52/18.3	154/11.7
Public Sector	8/ 4.2	11/ 9.4	3/ 5.5	106/15.8	6/ 2.1	134/10.1
Other	59/30.6	27/23.1	14/25.5	226/33.6	80/28.2	406/30.7

Chi Square 180.485 ***= $p<.01$

Table 23.1 -- INTEREST IN FURTHER TRAINING

	Yes		No	
	n	%	n	%
By Curriculum				
Academic	908	87.6	129	12.4
General	319	70.1	136	29.9
AVTS	297	69.6	130	30.4
HSVOC	176	65.7	92	34.3
TOTAL	1700	77.7	487	22.3
Chi Square 112.156		*** = $p < .01$		
By Sex				
Male	818	77.3	240	22.7
Female	882	78.1	247	21.9
Chi Square 0.205				
By Year of Graduation				
1983	760	79.1	201	20.9
1986	652	80.5	158	19.5
1990	288	69.2	128	30.8
Chi Square 21.954		*** = $p < .01$		

Table 23.2 -- TYPE OF FURTHER TRAINING

	Job Specific		Associate Degree		4-Year Degree		Other	
	n	%	n	%	n	%	n	%
By Curriculum:								
Academic	239	27.1	78	8.8	161	18.2	405	45.9
General	132	42.2	70	22.4	62	19.8	49	15.7
AVTS	155	54.6	41	14.4	42	14.8	46	16.2
HSVOC	83	47.7	31	17.8	33	19.0	27	15.5
TOTAL	609	36.8	220	13.3	298	18.0	527	31.9
			Chi Square 209.613		*** = $p < .01$			
By Sex:								
Male	334	42.2	96	12.1	134	16.9	227	28.7
Female	275	31.9	124	14.4	164	19.0	300	34.8
			Chi Square 19.314		*** = $p < .01$			
By Year of Graduation:								
1983	270	36.7	89	12.1	110	15.0	267	36.3
1986	228	36.3	78	12.4	107	17.0	215	34.2
1990	111	38.3	53	18.3	81	27.9	45	15.1
			Chi Square 56.723		*** = $p < .01$			

Table 24 -- SIZE OF BUSINESS

	1-19		20-99		100-499		500+	
	n	%	n	%	n	%	n	%
By Curriculum:								
Academic	235	22.8	240	23.3	250	24.3	305	29.6
General	149	33.1	115	25.6	88	19.6	78	21.8
AVTS	167	39.1	113	26.5	74	17.3	73	17.1
HSVOC	89	33.7	58	22.0	57	21.6	60	22.7
TOTAL	640	29.5	526	24.2	469	21.6	536	24.7
		Chi Square	64.612		*** = $p < .01$			
By Sex:								
Male	335	32.0	261	24.9	201	19.2	251	24.0
Female	305	27.2	265	23.6	268	23.9	285	25.4
		Chi Square	10.586					
By Year of Graduation:								
1983	230	24.2	213	22.4	222	23.3	287	30.2
1986	241	29.9	208	25.8	166	20.6	190	23.6
1990	167	40.8	105	25.4	81	19.6	59	14.3
		Chi Square	62.288		*** = $p < .01$			

Table 25 -- COMMUTING DISTANCE TO WORK

	Less Than 5 Miles		6-10 Miles		11-20 Miles		20+ Miles	
	n	%	n	%	n	%	n	%
By Curriculum:								
Academic	355	34.4	237	22.9	253	24.5	188	18.2
General	178	39.3	141	31.1	84	18.5	50	11.0
AVTS	164	38.1	124	28.8	96	22.3	47	10.9
HSVOC	109	41.1	65	24.5	64	24.2	27	10.2
TOTAL	806	36.9	566	25.9	498	22.8	312	14.3
		Chi Square	40.124		*** $p<.01$			
By Sex: Chi .752								
Male	397	37.7	275	26.1	230	21.9	150	14.3
Female	409	36.2	291	25.8	268	23.7	162	14.2
		Chi Square	1.205					
By Year of Graduation:								
1983	333	34.8	232	24.2	232	24.2	161	16.8
1986	277	34.3	229	28.4	180	22.3	121	15.0
1990	176	47.0	105	25.2	86	20.6	30	7.2
		Chi Square	38.192		*** $p<.01$			

Table 25.1 -- CHANGE OF RESIDENCE

	Academic		General		AVTS		HSVOC		TOTAL	
	n	%	n	%	n	%	n	%	n	%
No Change	1304	61.11	297	49.92	277	55.07	153	45.22	2031	57.00
Changed/within an area	375	17.57	228	38.32	179	35.59	149	45.02	931	26.13
Changed/within Pennsylvania	181	8.48	30	5.04	24	4.77	18	5.44	253	7.10
Changed/out of Pennsylvania	274	12.84	40	6.72	23	4.57	11	3.32	348	9.77
TOTAL	2134	59.89	595	16.70	503	14.12	331	9.29	3563	100.00

Table 26 -- SELF EMPLOYED

	Yes		No	
	n	%	n	%
By Curriculum Chi .053				
Academic	46	4.4	990	95.6
General	36	8.0	416	92.0
AVTS	26	6.1	403	93.9
HSVOC	17	6.4	248	93.6
TOTAL	125	5.7	2057	94.3
Chi Square 7.688				
By Sex				
Male	82	7.8	974	92.2
Female	43	3.8	1083	96.2
TOTAL	125	5.7	2057	94.3
Chi Square 15.714		***= p<.01		
By Year of Graduation Chi .105				
1983	65	6.8	889	93.2
1986	43	5.3	766	95.7
1990	17	4.1	402	95.9
TOTAL	125	5.7	2057	94.3
Chi Square 4.502				

Table 27: WAGES

	1983		1986		1990		TOTAL	
CURRICULUM	n	$	n	$	n	$	n	$
Academic	436	499.38	343	398.96	93	251.99	872	433.50
General	144	403.16	112	371.58	74	259.11	330	360.14
AVTS	109	425.08	100	400.29	94	272.16	303	369.20
HSVOC	94	404.71	74	323.34	41	294.12	209	354.20
TOTAL	783	459.98	629	385.40	302	265.74	1714	398.38

General Linear Regression

Source	DF	Type I SS	F Value	PR F
YOC*HSC	6	822016.83616004	5.01	0.0001

DF	Type III SS	F Value	PR F
6	822016.83616004	5.01	0.0001